



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/816,661	04/02/2004	Marufa Kaniz	H1246	1039
29393 7590 09/30/2008 ESCHWEILER & ASSOCIATES, LLC NATIONAL CITY BANK BUILDING 629 EUCLID AVE., SUITE 1000 CLEVELAND, OH 44114				
EXAMINER BAYOU, YONAS A				
ART UNIT 2134		PAPER NUMBER		
NOTIFICATION DATE 09/30/2008		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Docketing@eschweilerlaw.com

### Office Action Summary

**Application No.**

10/816,661

**Applicant(s)**

KANIZ ET AL.

**Examiner**

YONAS BAYOU

**Art Unit**

2134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6, 8-12 and 14-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-12 and 14-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04/02/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB08)
- Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. This office action is in response to applicant's response filed on 09/18/2008.
2. Claims 1-6, 8-12 and 14-23 are pending.
3. Claims 1, 4, 10-11 and 15 are amended.
4. Claims 7 and 13 are cancelled.
5. Claim 23 is a new claim.
6. Applicant's arguments have been fully considered but they are not persuasive.

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09/18/2008 has been entered.

***Response to Arguments***

1. Applicant's arguments with respect to claims 1-6, 8-12 and 14-23 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6, 8-12 and 14-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dwork et al. Patent Number 6,963,946 B1 in view of Chin et al., Patent No.: US 7,274,792 B2.

Referring to claims 1, 10-11, 15 and 23, Dwork teaches a network interface system for interfacing a host system with a network to provide outgoing data from the host system to the network and to provide incoming data from the network to the host system, the network interface system comprising:

a bus interface system adapted to be coupled with a host bus in the host system and transfer data between the network interface system and

the host system **[column 1, line 60 – column 2, line 11 and fig. 2];**

a media access control system adapted to be coupled with the network and to transfer data between the network interface system and the network **[column 13, lines 1-45 and fig. 2,** which in turn coupled with the network];

a memory system coupled with the bus interface system and the media access control system, the memory system being adapted to store incoming and outgoing data being transferred between the network and the host system **[column 9, lines 40-60 and figs. 1A and 1B];**

a security system coupled with the memory system, the security system being adapted to selectively encrypt outgoing data and to selectively decrypt incoming data **[column 14, lines 37-57 and fig. 2];** and Dwork further teaches: a descriptor management system coupled with the bus interface system and the security system, the descriptor management system being adapted to obtain initialization vector information from the host system and to provide the initialization vector information to the security system **[column 24, lines 39-67 and figs. 5D-5F].** Dwork does not appear to explicitly teach a system, wherein the security system is adapted to employ an initial random data string from the outgoing data to begin encryption before security association information has been retrieved by the security system. However, Chin teaches in FIG. 2, is a diagrammatic representation of one example of a cryptography accelerator 201. The cryptography accelerator 201 includes an interface 203 connected to a host such as an external processor. The interface 203 can receive information from

Art Unit: 2134

the host for processing and send information to the host when processing is completed. In one example, the interface 203 includes a controller and context buffers. The controller derives information from data received from the host and provides the information along with context such as algorithm information, initialization values, and keys to the various encryption and authentication engines. Cryptography engine 209 can include DES engine 221 and AES engine 223 **[abstract. 4:4-17 and fig. 2]**. Dwork and Chin are analogous art because both teach encryption operation.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the method of Dwork to include the controller derives information from data received from the host and provides the information along with context such as algorithm information, initialization values, and keys to the various encryption and authentication engines of Chin because a sender generates an initialization vector, identifies cryptographic keys, encrypts data using the initialization vectors and the cryptographic keys, and transmits the encrypted data in a packet along with the initialization vector **[abstract]**, please see *KSR International Co. v. Teleflex Inc.*, 550 U.S., 82 USPQ2d 1385 (2007) for further interpretation.

Referring to claim 2, Dwork teaches a network interface system, wherein the security system comprises at least one transmit security processor adapted to selectively encrypt or selectively authenticate the outgoing data **[column 14, lines 37-57 and fig. 2]**.

Referring to claims 3 and 9, Dwork teaches a network interface system, wherein the initialization vector information indicates whether the outgoing data is to undergo cipher block chaining (CBC) encryption in the security system **[column 14, lines 37-57 and fig. 2].**

Referring to claims 4, 5, 17 and 20, Dwork teaches a network interface system, wherein the at least one transmit security processor selectively employs an initialization vector (IV) comprising the initial random data string from the outgoing data to perform CBC encryption according to the initialization vector information from the descriptor management system **[column 14, lines 37-57 and fig. 2].**

Referring to claims 6, 8, 12, 14, 18, 19, 21 and 22, Dwork teaches a network interface system, wherein the initialization vector information indicates a length of an initialization vector in the outgoing data **[column 24, lines 49-59 and figs. 5E and 5F].**

Referring to claim 16, Dwork teaches a method of encrypting outgoing data in a network interface system, wherein providing the initialization vector information comprises:

reading a transmit descriptor from a host system **[column 13, lines 45-65, figs. 2, 4 and 5A-5J]; and**

providing initialization vector information from the transmit descriptor to the security system [col. 12, lines 5-34; col. 19, lines 15-49 and figs. 1E and 2-4].

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YONAS BAYOU whose telephone number is (571)272-7610. The examiner can normally be reached on m-f, 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on 571-272-3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Art Unit: 2134

/Yonas Bayou/

Examiner, Art Unit 2134

09/24/2008

/Kambiz Zand/

Supervisory Patent Examiner, Art Unit 2134